

THE INVENTION CLAIMED IS

1. A magnetic storage device, comprising:

5           a stripe of magnetic material having a longitudinal length, and a front side and a back side, and able to store electronic data as a magnetic recording comprising a plurality of bits;

10           a magnetic write head permanently positioned on said back side of the stripe at a particular data bit of one of said plurality of bits, and providing for electronic-magnetic alteration of a data bit magnetically readable on said front side; and

15           a magnetic recording serially accessible to a longitudinally moving read head on said front side of the stripe that includes said data bit affected by the magnetic write head.

2. The magnetic storage device of claim 1, further comprising:

20           a user access record encoded within the magnetic recording.

3. The magnetic storage device of claim 1, further comprising:

          a financial account number of a user encoded within the magnetic recording; and

25           a controller connected to the magnetic write head and providing for a subsequent obfuscation of the financial account number by re-recording of said data bit.

4. The magnetic storage device of claim 1, further comprising:

30           a usage-counter record encoded within the magnetic recording; and

a controller connected to the magnetic write head and providing for a subsequent incrementing of the usage-counter record by re-recording said data bit.

5           5. The magnetic storage device of claim 4, further comprising:  
            detectors connected to signal the controller when a  
reading of data in the magnetic recording has occurred.

            6. A magnetic storage device, comprising:  
10           a stripe of magnetic material having a longitudinal  
length, and a front side and a back side, and able to store  
electronic data as a magnetic recording comprising a plurality of  
bits;  
            an array of magnetic transducer write heads permanently  
15 positioned on said back side of the stripe in a particular series of  
said plurality of bits, and providing for electronic-magnetic  
alteration of corresponding data bits magnetically readable on said  
front side; and  
            a magnetic recording serially accessible to a  
20 longitudinally moving read head on said front side of the stripe  
that includes said data bits affected by the array of magnetic-  
transducer write heads.

            7. The magnetic storage device of claim 6, further comprising:  
25           a controller connected to the array of magnetic transducer  
write heads, and providing for an incrementing of a usage-counter  
record subsequent to each use.

            8. A magnetic storage device, comprising:  
30           a stripe of magnetic material having a longitudinal  
length, and a front side and a back side, and able to store

electronic data as a magnetic recording comprising a plurality of bits;

an array of magnetic transducer write heads permanently positioned on said back side of the stripe that constitutes a whole  
5 series of said plurality of bits, and providing for electronic-magnetic alteration of corresponding data bits magnetically readable on said front side; and

a magnetic recording serially accessible to a longitudinally moving read head on said front side of the stripe  
10 that only includes said data bits affected by the array of magnetic-transducer write heads.

9. A method for preventing unauthorized use of a payment card, comprising:

15 recording a user payment account number as a serial magnetic recording on a magnetic stripe of a user payment card;  
detecting each magnetic reading of said magnetic stripe by an external magnetic reader; and  
re-recording at least one bit of said serial magnetic  
20 recording from a backside of said magnetic stripe and internal to said user payment card.

10. The method of claim 9, wherein:

the step of re-recording is in response to the step of  
25 detecting and obfuscates said user payment account number to prevent subsequent readings.

11. The method of claim 9, wherein:

the step of re-recording is in response to the step of  
30 detecting and obfuscates said user payment account number after a delay to prevent subsequent readings within a predetermined time frame.

12. A business model method, comprising:

incrementing a current usage-counter number on the  
magnetic stripe of a user payment card each time the card is swiped;

5        maintaining a last validly used usage-counter number by a  
payment authorization center for each particular user;

checking each transaction presented for authorization to  
see if said current usage-counter number exceeds said last validly  
used usage-counter number; and

10       declining a transaction if said current usage-counter  
number does not exceed said last validly used usage-counter number.